

Cisco TCP/IP Suite 100

This chapter provides information on the Cisco TCP/IP Suite 100 software for Windows. The information is organized into the following sections:

- Product Overview
- Standard Features
- Benefits
- Product Numbers

Product Overview

Cisco TCP/IP Suite 100 V2.0 software is a complete TCP/IP solution for Windows 3.x and Windows 95 users, consisting of a high-performance 32-bit virtual device driver kernel and a well integrated set of applications. Based on the industry-standard TCP/IP protocols, the kernel provides a broader and more robust feature set than the basic TCP/IP services included with the operating system. The applications provide significant additional functionality for file sharing, host connectivity, electronic mail, Web browsing, network printing, and remote network access. For Windows 95, the applications are native, 32-bit versions of their 16-bit counterparts for Windows 3.x. Cisco TCP/IP Suite 100 is fully WINSOCK API v1.1 compatible. Designed specifically for the enterprise network, Cisco TCP/IP Suite 100 provides the highest levels of performance, reliability, and ease of use.



Standard Features

Cisco TCP/IP Suite 100 includes the following features:

- Easy to install

The software installs with minimal interaction and includes a configuration wizard that guides you through the TCP/IP configuration process. You can choose either a complete quick install or the custom option to selectively install specific applications. The installer automatically detects the operating system, network card, and driver type to further simplify the process. Network administrators can tailor the installation kit for their site with the network server-based installation process.

- High-performance 32-bit virtual device driver kernel
The kernel was designed with a unique architecture that maximizes performance while minimizing system requirements. Optimized for the WINSOCK API, the Virtual Device Driver (VxD) kernel requires no DOS terminate and stay resident programs (TSRs) for operation, minimizing memory requirements. The kernel API minimizes communications between WINSOCK and the kernel, providing an efficient, high-performance stack. Standard kernel features include DHCP, BOOTP, router discovery, routing information protocol (RIP) listener, IP multicast, and classless inter-domain routing (CIDR) supernetting. NetBIOS over TCP/IP support is provided via the TDI interface using Microsoft's standard NetBIOS modules.
- Network File System client
The Network File System (NFS) client application has been fully integrated into the Windows environment. Files and applications on remote servers appear as local drives in the Explorer or File Manager. Windows 95 users will appreciate the shell extensions and right-click support. With automatic handling of long file names, UNIX "hidden" files, and automatic mount on startup, NFS is easy to use. Performance has been optimized using read-ahead and write-behind algorithms, which ensure better network bandwidth utilization.
- Terminal emulation: TN3270, TN5250, and VT100-420
Integrated Telnet terminal emulation application for host connectivity. This single application automatically detects the host type and determines which emulation module is required. IBM 3278 and AS/400 systems as well as DEC and UNIX host systems are supported. Security is enhanced beyond standard cleartext passwords with Kerberos and token authentication. Multiple sessions can be run concurrently. Telnet supports drag-and-drop keyboard remapping, TrueType scalable fonts, cut and paste, user-defined scrollbar buffer, user-selectable colors, and host-based as well as screen printing.
- File Transfer Protocol client and server
File transfers to and from remote systems are supported using the file transfer protocol (FTP) client or server. The client automatically detects the FTP server types and refreshes listings. The unique user interface allows resizing of the split windows for remote and local hosts, along with multiple drag and drop file transfers. Anonymous FTP, passive mode, and firewall username/passwords are supported for secure Internet access. The FTP server allows you to set up your PCs as FTP hosts, so you can share files with other systems. Access is controlled by a password file for user authentication and directory level access control.
- Electronic mail
Pronto Mail is included. This Internet standard e-mail application supports SMTP, POP3, multipurpose Internet mail extension (MIME) and simple mail/messaging applications programming (MAPI) protocols. The user-friendly interface provides drop-down, drag-and-drop folders, filters, and search capability. It also supports attachments, an address book, aliases and distribution lists, spell check, and multiple signatures.

- **Web browser**

Spyglass' enhanced Mosaic Web browser is integrated into Cisco TCP/IP Suite 100. This Web browser supports the standard HyperText transport protocol (HTTP) and multiple asynchronous connections. It includes built-in viewers, tables, text wrap, and progressive image display to optimize performance. Secure socket layer support is included for secure Internet transactions.
- **Network printing**

Users have the ability to connect to printers and to print anywhere on the network with the Cisco TCP/IP Suite 100. The direct Print Wizard and Print Manager interfaces, along with the Cisco-supplied Print Assistant with its tab dialog for setup and configuration, make it easy to use. The broadest range of network printing options are supported with connections via LPR, personal computer network file system (PCNFS), or Stream (also known as reverse Telnet) protocols.
- **Windows dialer**

Remote access is fully supported using the dialer application. SLIP, CSLIP (compressed SLIP), and PPP are all supported. PAP and CHAP are implemented to increase security. The user-friendly interface makes it easy to set up automatic login scripts. High performance is ensured by using dynamically resizeable buffers that optimize data flow to and from the serial port. This reduces data overruns and dropped characters without replacing the standard Windows communications drivers.
- **Network diagnostics**

A range of network diagnostics and utilities are provided to make troubleshooting easy. The MultiNet Tools utility has been incorporated into the toolbar of the other applications. As a result, the following tools are always one click away: ping, finger, traceroute, whois, and host lookup. In addition, the Monitor utility includes vital information such as the connection, routing, and interface tables, the Address Resolution Protocol (ARP) cache, and protocol and buffer statistics. If the technical support staff needs a packet trace to diagnose problems, the TCPDump utility captures and displays packets. An SNMP agent provides MIB-II compliant access to information for network management.
- **Online documentation and context-sensitive help**

Includes a complete documentation set in HTML format. You have immediate access to the information using any Web browser. The product also has an outstanding online help system. It is fully context-sensitive, with embedded links and numerous graphics. Similar to Microsoft's help system, it includes a search capability. It also contains an extensive TCP/IP glossary with request for comment (RFC) references.
- **Full WINSOCK v1.1 and industry-standard protocol support**

The WINSOCK v1.1 API is fully supported with an architecture designed to reduce the overhead found in other implementations.

The following list of RFCs are among those supported:

 - IP (RFC 791)
 - TCP (RFC 793)
 - UDP (RFC 768)
 - ICMP (RFC 792)

- ARP (RFC 826)
- Host Requirements (RFC 1122)
- SNMP (RFC 1213)
- DHCP (RFC 1541)
- BOOTP (RFC 951)
- Router Discovery (RFC 1256)
- RIP (RFC 1058)
- Path MTU Discovery (RFC 1191)
- CIDR supernetting (RFC 1519)
- Multicast (RFC 1112)
- NetBIOS/TDI (RFC 1001, 1002)

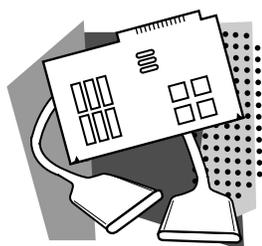
Benefits

Cisco TCP/IP Suite 100 includes the following benefits:

- Designed specifically as the complete desktop TCP/IP solution for the demands of enterprise networking
- Optimized for use with Cisco Internetwork Operating System (Cisco IOS) software
- Users are more productive with the integrated and intuitive applications and better network performance
- Network managers find troubleshooting simpler with the effective diagnostic tools and utilities
- Eliminates multiple service organizations through a single support call

Table 312 Cisco TCP/IP Suite 100 Summary of Features

Characteristic	Description
High performance—architecture has been designed to maximize performance	Increased productivity with the high-performance applications. Quick access to host systems and fast file transfers increase productivity and decrease user frustration.
High reliability—robust and reliable TCP/IP kernel	Eases burden on network administrators and keeps you working efficiently.
Easy to use—familiar Windows user interface, integrated applications, online help, network diagnostics	Easy to install and configure. Easy to learn because of consistent application look and feel. Simplifies remote dial-in access and access to host systems. Users and administrators can monitor network statistics for analysis.



Product Numbers

Cisco TCP/IP Suite 100 V2.0 includes all components for Windows 3.x and Windows 95 on a single CD-ROM, including extensive online documentation. You can order a key-only product if you have previously received an evaluation copy, or you can order a complete media kit including a quick start guide, *Getting Started with Cisco TCP/IP Suite 100 for Windows*. The publication *Using Cisco TCP/IP Suite 100 for Windows* is included on the CD-ROM and is available as an optional document. Table 313 lists the product numbers you can use to order Cisco TCP/IP Suite 100. For documentation product numbers, refer to the “Internet Products” section in the “Documentation” chapter, later in this catalog.

Table 313 Cisco TCP/IP Suite 100 Product Numbers

Description	Product Number
Cisco TCP/IP Suite 100 for Windows, 1 user	IPSUITE-WIN-1
Cisco TCP/IP Suite 100 for Windows, 5 users	IPSUITE-WIN-5
Cisco TCP/IP Suite 100 for Windows, 10 users	IPSUITE-WIN-10
Cisco TCP/IP Suite 100 for Windows, 25 users	IPSUITE-WIN-25
Cisco TCP/IP Suite 100 for Windows, 50 users	IPSUITE-WIN-50
Cisco TCP/IP Suite 100 for Windows, 100 users	IPSUITE-WIN-100
Cisco TCP/IP Suite 100 for Windows, 250 users	IPSUITE-WIN-250
Cisco TCP/IP Suite 100 for Windows, 500 users	IPSUITE-WIN-500
Cisco TCP/IP Suite 100 for Windows, 1000 users	IPSUITE-WIN-1000
Cisco TCP/IP Suite 100 for Windows, 2500 users	IPSUITE-WIN-2500
Cisco TCP/IP Suite 100 for Windows, 5000 users	IPSUITE-WIN-5000
Cisco TCP/IP Suite 100 for Windows, 10000 users	IPSUITE-WIN-10000
Cisco TCP/IP Suite 100 for Windows, 25000 users	IPSUITE-WIN-25000
Optional Products (one of the following two products must be ordered)	
Cisco TCP/IP Suite 100 for Windows, key only	IPSUITE-WIN-KEY
Cisco TCP/IP Suite 100 for Windows CD-ROM kit	IPSUITE-WIN-CDKIT
Spare Products	
Cisco TCP/IP Suite 100 for Windows CD-ROM kit	IPSUITE-WIN-CDKIT=
Cisco TCP/IP Suite 100 for Windows CD-ROM media	IPSUITE-WIN-CD=
Cisco TCP/IP Suite 100 for Windows evaluation kit	IPSUITE-WIN-EVAL=

